

Dr. Viet Quoc Pham

CONTACT INFORMATION

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PROFILES: [Google Scholar](#), [ResearchGate](#), [Web of Science](#), [Scopus](#), [LinkedIn](#), and [ORCID](#)

HIGHLIGHTS

Currently, 8 PhD students (including 2 visiting students and 3 co-supervised students), 6 MSc students, 5 graduated PhD (co-supervised, including 2 females), and 4 graduated MSc.

Best PhD Dissertation Award, Ranked #1 in Engineering.

IEEE ComSoc Best Young Researcher Award for EMEA 2023 for research activities for the benefit of the ComSoc.

IEEE Senior Member since 2023. Member of the IEEE ComSoc and the IEEE VTS.

120+ published/accepted Transactions/Magazines/Letters, 40+ conference papers, 1 authored book, 8 book chapters, and numerous IEEE Best Paper Awards.

Best Computer Science Scientists (in Ireland and worldwide), Research.com, 2024. World's Top 2% of Scientists on Stanford University List, 2021-2023.

Google Scholar Citations 12,000+, **h-index 47+**, and **i10-index 100+**.

PI of numerous R&D projects funded by prestigious funding sources like NRF and HORIZON MSCA. Involvement in winning over €2.64m in R&D funding.

Editorship experience in top-tier journals, including IEEE Communications Letters and Journal of Network and Computer Applications.

Vietnam Golden Globe Science and Technology Award 2021.

EDUCATION

- AUG. 2017 Doctor of Engineering in TELECOMMUNICATIONS, **Inje University**, Korea
Thesis: "Fair and Energy-Efficient Resource Allocation Optimization in Wireless Networks"
Prize: **Best PhD Dissertation Award**, Ranked #1 in Engineering
- AUG. 2015 MSc in TELECOMMUNICATIONS ENGINEERING, **Inje University**, Korea
Thesis: "Multi-Timescale Cross-Layer Design in Wireless Multihop Networks"
- AUG. 2013 BSc in ELECTRONICS AND TELECOMMUNICATIONS ENGINEERING
Hanoi University of Science and Technology, Vietnam
Thesis: "Building an Observational Data Processing and Archiving Center for Automatic Water Level Gathering and Alarming System" (in Vietnamese)

ACADEMIC EXPERIENCE

- JAN. 2023 - CURRENT **Assistant Professor** in Networks and Distributed Systems,
School of Computer Science and Statistics, Trinity College Dublin,
The University of Dublin, Republic of Ireland
- JAN. 2023 - CURRENT **TCD Supervisor**,
SFI Centre for Research Training in Advanced Networks for Sustainable Societies,
ADVANCE CRT, Republic of Ireland
- JAN. 2023 - CURRENT **Associate Investigator**, SFI Research Centre for Future Networks and Communications,
CONNECT, Republic of Ireland

JAN. 2020 - JAN. 2023	Research Professor, Korean Southeast Center for the 4th Industrial Revolution Leader Education, Pusan National University, Republic of Korea
MAR. 2018 - DEC. 2019	Research Professor, ICT Convergence Research Center, Changwon National University/Inje University, Republic of Korea
SEP. 2017 - FEB. 2018	Post-Doctoral Research Fellow, Department of Computer Science and Engineering, Kyung Hee University, Republic of Korea
SEP. 2013 - JUN. 2017	Research Assistant (PhD Student), Department of Information and Communication System, Inje University, Republic of Korea
FEB. 2012 - AUG. 2013	Research Assistant (Senior Student), School of Electronics and Telecommunications, Hanoi University of Science and Technology, Vietnam

ADMINISTRATIVE EXPERIENCE

AUG. 2023 - PRESENT	Demonstrator and Teaching Assistant Director, School of Computer Science and Statistics, Trinity College Dublin
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VISITING EXPERIENCE

JUN. 2023 - JUL. 2023	University of Ulsan, Korea, Prof. Sunghwan Kim
JAN. 2016 - FEB. 2016	Tokyo University of Science, Japan, Prof. Mikio Hasegawa
AUG. 2019 - AUG. 2019	Tokyo University of Science, Japan, Prof. Mikio Hasegawa

GRANTS AND PROJECTS

2024 - 2028	HORIZON MSCA Staff Exchange (SE) 2023 (€1,545,600, 4 years) Principal Investigator (TCD), Project 101182933 Title: <i>ENSURE-6G: Evolution in Security and Privacy for 6G Networks</i>
2023 - 2025	Enterprise Ireland's ERC Funding Support (€15,982, 2 years) Principal Investigator, Project EC20231518 Title: <i>Generalized Knowledge Abstraction for Data Reconstruction and Lifelong Learning</i>
2024 - 2026	Vietnam NAFOSTED Basic Science and Research (2 years) Key Participant, Project 102.02-2023.06 Title: <i>Improving Efficiency of Drone Surveillance Systems using Deep Learning</i>
2019 - 2024	Korea NRF Basic Science and Research (500,000,000 KRW, 5 years) Principal Investigator (sole PI), Grant NRF-2019R1C1C1006143 Title: <i>Privacy Enhancing Connected Cars in 5G and Beyond</i>
2022 - 2024	FDCRGP Grant, Nazarbayev University (\$136,000, 3 years) Co-Principal Investigator, Grant No. 11022021FD2925 Title: <i>Edge-assisted Activity Recognition using Skeletal Representation and DL for Video Surveillance</i>
2019 - 2024	Korea NRF Basic Science and Research (500,000,000 KRW, 5 years) Key Participant, Grant NRF-2019R1I1A3A01060518 Title: <i>Edge Computing in the 5G Ecosystem: Joint 4C Framework and Its Applications</i>
2018 - 2019	Korea NRF Basic Science and Research (25,000,000 KRW), Key Participant Project in collaboration with The University of Sydney, Grant NRF-2018K2A9A1A01090540 Title: <i>Low Overhead Channel Access for 5G Mobile Communications in Large-Scale IoT Networks</i>
2020 - 2027	Brain Korea (BK) 21 (549,825,000 KRW/year), Participant, Pusan National University, Korean Southeast Center for the 4th Industrial Revolution Leader Education

AWARDS AND RECOGNITION

- Best Computer Science Scientists (in Ireland and worldwide), Research.com, 2024.
- Best Paper Award, IEEE Consumer Electronics Magazine, 2024.
- IEEE ComSoc Best Young Researcher Award for EMEA, 2023.
- Coordination Support Award, Enterprise Ireland, 2023-2025.
- TCD School of Computer Science and Statistics Award, 2023-2027.
- Decade of Contribution Award, Wireless AI (WAI) Laboratory, Pusan National University, 2023.
- Best Paper Award, IEEE ATC Conference, 2022.
- Award for Outstanding Contributions and Research Excellence, Minister of Education (Korea), 2021.
- Golden Globe Award 2021 for Young Scientists, Ministry of Science and Technology (Vietnam), 2021.
- World's Top 2% of Scientists on Stanford University List, 2021-2023.
- Top Reviewer Award, IEEE Transactions on Vehicular Technology, 2020.
- Best PhD Dissertation Award (ranking #1), Inje University, 2017.
- Leadership and Scientific Publication Scholarship, Inje University, 2015-2016.
- Best Paper Award, KMMS 2014, JKCCS 2016, KJCCS 2020, KICS 2021.
- Prize for Excellent Students, Vietnamese Students' Association in Korea (VSAK), 2015.
- University Scholarship for Excellent Students, HUST, 2010-2013.

MENTORING AND TEACHING EXPERIENCE

Lecturer, Trinity College Dublin

1. **Microprocessor Systems - CSU23021**, Hilary teaching term, second-year undergraduate module: *This module provides a holistic overview of how a typical general-purpose computing system functions, followed by a deep-dive into the various key architectural features of such systems.* Academic years: 2022-2023, 2023-2024
2. **CS7091 - Industrial / Research Lab Internship**: This is an internship module for fifth-year master students. Academic years: 2023-2024

Assistant Lecturer, Pusan National University, 2021

1. **AI for NextG networks** (Winter 2021, graduate course): *The students learn how to apply different AI techniques (e.g., machine, deep, federated, and reinforcement learning) for NextG networks, and how NextG wireless can help to improve the performance of AI and deployment of AI services.*

Adjunct Lecturer, Inje University, 2018 - 2019

1. **Convex optimization** (Fall 2018, graduate course): *This course focuses on the fundamentals of convex functions and problem formulation and optimization. Further, this course is also a prerequisite for advanced courses, such as game theory, artificial intelligence, and machine learning.*
2. **Game theory in wireless and communication networks** (Spring 2019, graduate course): *This course equips the students with promising mathematical tools (e.g., cooperative games, coalitional games, and Stackelberg games) to solve problems in wireless and communication networks from the economics perspectives.*
3. **Machine learning in wireless and communication networks** (Fall 2019, graduate course): *This course delivers the fundamental concepts of machine learning (supervised and unsupervised learning) and its applications to future wireless networks and Internet-of-Things systems.*

Teaching Assistant, Inje University, 2016 - 2017

1. Introduction to Android Programming (Fall 2016, undergraduate course): *Responsible for preparation of teaching materials, assignments, term projects, and labs.*
2. Data and Computer Communications (Fall 2016, Spring 2017, Fall 2017, undergraduate course): *Responsible for preparation of teaching materials, term projects, and labs.*

Mentoring Assistant, Hanoi University of Science and Technology, 2012

1. Project II (Fall 2012, undergraduate course): *Worked as a senior student and guided 4th-year undergraduate students on programming skills and testbed designs.*

FIELDS OF RESEARCH INTEREST

- **COmputing:** cloud edge computing, aerial computing, edge of things, and edge AI.
- **Intelligence:** wireless AI, deep learning, deep reinforcement learning, and federated learning.
- **Networking:** 6G wireless, IoT, intelligent surfaces, metaverse, and blockchain.

SUPERVISION

Current PhD Students

1. Linh Thanh Nguyen

- PhD Student, Trinity College Dublin, 2023/09 – Present.
- Topic: Blockchain-based intelligent security and privacy preservation for IoT data marketplace.

2. Tuan Van Tran

- PhD Student, Trinity College Dublin, 2023/09 – Present.
- Topic: Adaptive framework for scaling federated learning (FL) in IoT systems.

3. Hue Thi Dang

- PhD Student, Trinity College Dublin, 2024/03 – Present.
- Topic: Numeric accuracy and reproducibility in deep learning training and inference.
- Co-supervision with Prof. Andrea Patane.

4. Mengyan Huang

- PhD Student, Xidian University, 2021/09 – Present.
- Visiting PhD Student, Trinity College Dublin, 2023/10 – 2024/10.
- Topic: beamforming/precoding, physical layer security, satellite communications, and NOMA.

5. Jiahui Zhao

- PhD Student, Southeast University, 2020/09 – Present.
- Visiting PhD Student, Trinity College Dublin, 2024/01 – 2025/01.
- Topic: Semantic communication, mobile edge computing, deep reinforcement learning.

6. Hoc Thai Vu

- PhD Student, University of Ulsan, 2020/03 – Present.
- Topic: Performance analysis and data-driven optimization of 6G short-packet communications.

- Co-supervision with Professor Sunghwan Kim.

7. **Duong Minh Nguyen**

- PhD Student, Pusan National University, 2020/09 – Present.
- Topic: Deep reinforcement learning and federated learning for 6G Internet-of-Things.
- Co-supervision with Professor Won-Joo Hwang.

8. **Daeil Noh**

- PhD Student, Pusan National University, 2020/09 – Present.
- Topic: Deep learning for UAV recognition.
- Co-supervision with Professor Won-Joo Hwang.

Current MSc Students and Interns

1. **Alberti Mattia**, Statistics and Sustainability, 2023 - 2024.
2. **Agrawal Samarth**, Computer Science - Future Networked Systems, 2023 - 2024.
3. **Antony Anshal**, Computer Science - Future Networked Systems, 2023 - 2024: federated unlearning.
4. **Darda Tanay**, Computer Science - Future Networked Systems, 2023 - 2024.
5. **Fang Aoyang**, Computer Science - Future Networked Systems, 2023 - 2024.
6. **Habeeb Rahuman Ashiqur Rahman**, Computer Science - Future Networked Systems, 2023 - 2024.
7. **Ciara Lynch**, MSc Internship, 2023 - 2024.
8. **Yi Ren**, MSc Internship, 2023 - 2024.

Alumnus

1. **Mai Thi Le**, PhD, Pusan National University, 2021/03 – 2024/02. Thesis title: Resource allocation optimization in intelligent wireless networks (co-supervision with Prof. Won-Joo Hwang). Current position: Visiting researcher, Trinity College Dublin, Ireland.
2. **Thanh Thien Dao**, PhD, Pusan National University, 2020/09 – 2024/02. Thesis title: Deep learning-based automatic modulation classification (co-supervision with Prof. Won-Joo Hwang). Current position: AI researcher, Korea.
3. **Nadia Iradukunda**, PhD, Inje University, 2019/09-2022/08. Topic: Resource allocation optimization for UAV wireless backhaul 5G networks (co-supervision with Prof. Won-Joo Hwang). Current position: Lecturer, Mount Kenya University, Rwanda.
4. **Mai Thi Le**, MSc, Inje University, 2019/3-2021/2. Topic: Swarm intelligence for D2D communications with unlicensed spectrum (co-supervision with Prof. Won-Joo Hwang). Current position: Visiting researchers, Trinity College Dublin, Ireland.
5. **Hoang Huu Trung**, PhD, Inje University, 2018/9-2021/2. Topic: Machine learning for mmWave communications (co-supervision with Prof. Won-Joo Hwang). Current position: Lecturer, Hue University, Vietnam.
6. **Vo Ta Hoang**, PhD, Inje University, 2017/9-2020/2. Topic: Resource allocation for MEC systems (co-supervision with Prof. Won-Joo Hwang). Current position: Lecturer, Thuyloi University, Vietnam.
7. **Nguyen Tien Hoang**, MSc, Inje University, 2017/9-2019/8. Topic: Game theory for computation offloading in NOMA-MEC (co-supervision with Prof. Won-Joo Hwang). Current position: QA Project Leader, LG Innotek, Vietnam.

8. **Maurice Nduwayezu**, MSc, Inje University, 2017/9-2019/8. Topic: DRL for NOMA-MEC offloading (co-supervision with Prof. Won-Joo Hwang). Current position: PhD student, Seoul National University of Science and Technology (SeoulTech), Korea.
9. **Girmay Gebremariam**, MSc, Inje University, 2017/9-2019/8. Topic: Swarm intelligence for D2D communications with unlicensed spectrum (co-supervision with Prof. Won-Joo Hwang).

PROFESSIONAL ACTIVITIES

Membership

- Senior Member of the IEEE, 2023 – Present.
- Member of the IEEE Vehicular Technology Society (VTS), 2023 – Present.
- Member of the IEEE Communication Society (ComSoc), 2022 – Present.
- IEEE CTSoc Wireless and Network Technologies (WNT) Technical Committee, 2022 - Present.
- Member of the IEEE, 2018 – 2023.

Editor

- [IEEE Communications Letters](#), 2023 – Present.
- [REV Journal on Electronics and Communications](#), 2023 – Present.
- [Journal of Network and Computer Applications](#), 2020 – Present.
- [Frontiers in Communications and Networks](#), 2020 – Present.
- [Nature Scientific Reports](#), 2022 – 2023.

Guest Editor

- [IEEE Internet of Things Magazine](#), Special Issue on Federated Learning for Industrial Internet of Things, 2023 – Present.
- [IEEE Transactions on Consumer Electronics](#), Federated Learning for Personalized Recommendation of Consumer Electronics, 2023 – Present.
- [Computer Communications](#), Special Issue on Intelligent Device-free Sensing for Future Internet of Things: Emerging Trends and Challenges, 2023 – Present.
- [IEEE Internet of Things Journal](#), Lead Editor, Special Issue on Aerial Computing for the Internet of Things (IoT), 2021 – 2022.
- [Sensors](#), Special Issue on Security and Privacy in the Internet of Things (IoT), 2021 – 2022.

Invited Referee for Journals

- **Senior Reviewer:** IEEE Open Journal of the Communications Society.
- **IEEE Letters:** IEEE Communications Letters, IEEE Wireless Communications Letters, IEEE Networking Letters.

- **IEEE Transactions/Journals:** IEEE Communications Surveys & Tutorials, IEEE Transactions on Communications, IEEE Transactions on Wireless Communications, IEEE Transactions on Vehicular Technology, IEEE Transactions on Mobile Computing, IEEE Transactions on Cloud Computing, IEEE Transactions on Signal Processing, IEEE Transactions on Services Computing, IEEE Transactions on Parallel and Distributed Systems, IEEE Transactions on Computational Social Systems, IEEE Transactions on Green Communications and Networking, IEEE Transactions on Cognitive Communications and Networking, IEEE Transactions on Signal and Information Processing over Networks, IEEE Transactions on Industrial Informatics, IEEE Transactions on Network Science and Engineering, IEEE Internet of Things Journal, IEEE Journal on Selected Areas in Communications, IEEE Journal of Selected Topics in Signal Processing, IEEE Open Journal of the Communications Society, Proceedings of the IEEE.
- **IEEE Magazines:** IEEE Communications Magazine, IEEE Wireless Communications, IEEE Control Systems Magazine, IEEE Vehicular Technology Magazine, IEEE Computational Intelligence Magazine, IEEE Consumer Electronics Magazine, IEEE Communications Standards Magazine, IEEE Internet Computing.
- **Other Journals:** Nature Communications, ACM Computing Surveys, IEEE Systems Journal, IEEE Access, Computer Networks, Transactions on Emerging Telecommunications Technologies, EURASIP Journal on Wireless Communications and Networking, International Journal of Distributed Sensor Networks, Sensors.

Technical Program Committee

- **2024:** IEEE International Conference on Communications (ICC), The 13th Conference on Information Technology and its Applications (CITA), IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), IFIP/IEEE International Federation for Information Processing (IFIP) Networking, IEEE 100th Vehicular Technology Conference (VTC2024-Fall)
- **2023:** IEEE International Conference on Communications (ICC), IEEE Wireless Communications and Networking Conference (WCNC), IEEE VTC2023-Fall.
- **2022:** IEEE International Conference on Communications (ICC), IEEE Wireless Communications and Networking Conference (WCNC).
- **2021:** IEEE 94th Vehicular Technology Conference (VTC2021-Fall), IEEE International Smart Cities Conference (ISC2), EAI International Conference on Heterogeneous Networking for Quality, Reliability, Security and Robustness (EAI Qshine), IEEE Global Communications Conference (GLOBECOM).
- **2020:** ICCIS, IEEE Wireless Communications and Networking Conference (WCNC), IEEE International Conference on Communications (ICC), IEEE 91st Vehicular Technology Conference (VTC2020-Spring), IEEE Workshop on Security Trust Privacy in Emerging Cyber-Physical Systems (STP-CPS).

Program Vice-Chair

- **2024:** IEEE International Conference on Metaverse (Metaverse 2024).

TPC Chair/Co-Chair/Track Chair

- **2023:** 12th International Symposium on Information and Communication Technology (SoICT 2023), IEEE GLOBECOM 2023 "Edge Learning over Next-Generation Networks" Workshop.
- **2022:** 11th EAI International Conference on Game Theory for Networks (EAI GameNets 2022), ICIT 2022, 11th International Symposium on Information and Communication Technology (SoICT 2022), IEEE International Conference on Advanced Technologies for Communications (ATC).

Publicity Chair/Co-Chair

- **2023:** International Conference on Wireless Communications and Signal Processing (WCSP 2023).

Invited Book Reviewer

- Wiley, Springer, IEEE.

Proposal Evaluator

- National Research Foundation of Korea (NRF).
- Vietnam National Foundation for Science and Technology Development (NAFOSTED).
- Programme SASPRO 2.
- Dutch Research Council (NWO).
- Czech Science Foundation (GACR).

Thesis Evaluator/Reader

- School of Computer Science and Statistics, Trinity College Dublin, 2023.
- School of Information and Communication Technology, Hanoi University of Science and Technology, 2023.
- National University of Sciences and Technology (NUST), Pakistan, 2023.

Advisor for Scholarship and Fellowship Applications

- Korean Government Scholarship Program
- Korea Research Foundation Postdoctoral Fellowship for Foreigners
- Individual Professor Scholarships in Korea and Japan

Invited Talk

- Invited Talk, "Edge Computing: From Computing at the Edge to Edge Intelligence," University of Ulsan, Korea, July 11th 2023.
- Invited Talk, "6G Frontiers: Towards Future Wireless Systems," University of Ulsan, Korea, June 29th 2023.
- Invited Talk, "Wirelessly Powered Federated Learning Networks: Joint Power Transfer, Data Sensing, Model Training, and Resource Allocation," Pusan National University, Korea, June 23rd 2023.
- Invited Talk, "Communication-Efficient Federated Learning over Massive Internet-of-Things," University of Ulsan, Korea, June 22nd 2023.
- Online Invited Talk, "Communication-Efficient Federated Learning over Massive Internet-of-Things," Le Quy Don University, Vietnam, May 19th 2023.
- Keynote (with Prof. Won-Joo Hwang), "Multi-Access Edge Computing in 5G Networks and Beyond," Smart-Com 2018, Bangkok, Thailand, October 31st 2023.

PUBLICATIONS

Books

- [B1] C. de Alwis, **Q.-V. Pham**, and M. Liyanage, *6G Frontiers: Towards Future Wireless Systems*, Wiley-IEEE Press, Oct. 2022.

Book Chapters

- [B-C1] P. Hegde, R. Chengoden, N. Victor, T. Huynh-The, S. Bhattacharya, P. K. R. Maddikunta, T. R. Gadekallu, **Q.-V. Pham**, "Blockchain for the Metaverse: State-of-the-Art and Applications," in *Metaverse Communication and Computing Networks: Applications, Technologies, and Approaches*, Wiley-IEEE Press, 2023.
- [B-C2] T. Huynh-The, **Q.-V. Pham**, X.-Q. Pham, T. Do-Duy, and T. R. Gadekallu, "AI and Computer Vision Technologies for Metaverse," in *Metaverse Communication and Computing Networks: Applications, Technologies, and Approaches*, Wiley-IEEE Press, 2023.
- [B-C3] **Q.-V. Pham**, T. Huynh-The, M. Zeng, Z. Yang, Z. Ding, and W.-J. Hwang, "The Emergence of Aerial Computing: Applications and Challenges," in *6G Wireless: The Communication Paradigm Beyond 2030*, CRC Press, 2022.
- [B-C4] M. Zeng, E. Bedeer, X. Li, **Q.-V. Pham**, O. A. Dobre, P. Fortier, and L. A. Rusch, "IRS-Empowered Wireless Communications: State-of-the-Art, Key Techniques, and Open Issues," in *6G Wireless: The Communication Paradigm Beyond 2030*, CRC Press, 2022.
- [B-C5] **Q.-V. Pham**, Z. Yang, C. Huang, Q. Yang, T. Guo, Y. Xu, and Z. Zhang, "Machine Learning for UAV Communication-Assisted Computing Networks," in *Secure and Digitalized Future Mobility: Shaping the Ground and Air Vehicles Cooperation*, CRC Press, 2022.
- [B-C6] **Q.-V. Pham**, D. C. Nguyen, T. Huynh-The, W.-J. Hwang, and P. N. Pathirana, "Artificial intelligence and big data for COVID-19 and social distancing," in *Enabling Technologies for Social Distancing: Fundamentals, concepts and solutions*, IET Digital Library, 2022.
- [B-C7] D. C. Nguyen, **Q.-V. Pham**, M. Ding, P. N. Pathirana, and A. Seneviratne, "Security, privacy and blockchain applications in COVID-19 detection and social distancing," in *Enabling Technologies for Social Distancing: Fundamentals, concepts and solutions*, IET Digital Library, 2022.
- [B-C8] N.-N. Dao, N.-T. Dinh, **Q.-V. Pham**, T. V. Phan, S. Cho, and T. Braun, "Vulnerabilities in fog/edge computing from architectural perspectives," in *Fog/Edge Computing for Security, Privacy, and Applications*, Springer, 2021.

Preprints, Under Review

- [P1] R. Murugan, G. Srivastava, P. K. R. Maddikunta, G. Yenduri, T. Huynh-The, **Q.-V. Pham**, T. R. Gadekallu, and I. Rida, "Unlocking the Potential of Wearables: A Deep Dive Review into TinyML for Secure On-Device Intelligence," under review, *IEEE Internet of Things Journal*.
- [P2] M.-D. Nguyen, K. Le, K. Do, B.-S. Hua, **Q.-V. Pham**, W.-J. Hwang, "Domain Generalization via Pareto Optimal Gradient Matching," submitted, *Conference on Neural Information Processing Systems (NeurIPS)*.
- [P3] J. Zhao, M. Chen, Z. Yang, Y. Pan, D. Niyato, and **Q.-V. Pham**, "Resource Allocation for Semantic-Aware Wireless Communication Networks with Imperfect CSI," under review, *IEEE Transactions on Wireless Communications*.
- [P4] T.-H. Vu, S. K. Jagatheesaperumal, M.-D. Nguyen, N. Van Huynh, S. Kim, and **Q.-V. Pham**, "Applications of Generative AI (GAI) for Mobile and Wireless Networking: A Survey," under review, *IEEE Internet of Things Journal*.
- [P5] M. Alishahi, P. Fortier, M. Zeng, T. Huynh-The, and **Q.-V. Pham**, "Computation Rate Maximization for STAR-RIS Assisted Wireless Powered Mobile Edge Computing Network: TDMA or NOMA?," under review, *IEEE Internet of Things Journal*.
- [P6] T.-T. Dao, **Q.-V. Pham**, and W.-J. Hwang, "DTNet: A Dual-Stream Transformer Model for Short-Time Modulation Classification," under review, *IEEE Transactions on Vehicular Technology*.
- [P7] B. Zhang, N. V. Huynh, H. T. Dinh, D. N. Nguyen, and **Q.-V. Pham**, "DDPG-E2E: A Novel Policy Gradient Approach for End-to-End Communication Systems," under review, *IEEE Transactions on Cognitive Communications and Networking*.

- [P8] Z. Zhao, Z. Yang, X. Gan, **Q.-V. Pham**, C. Huang, W. Xu, and Z. Zhang, "A Joint Communication and Computation Design for Semantic Wireless Communication with Probability Graph," *Journal of the Franklin Institute*, 2023.
- [P9] T.-H. Vu, D. B. da Costa, S. Kim, and **Q.-V. Pham**, "Downlink Multiuser RSMA Networks: A General Analytical Framework for the Error Rate Performance," under review, *IEEE Transactions on Communications*.
- [P10] M.-D. Nguyen, Q.-V. Do, Z. Yang, **Q.-V. Pham**, and W.-J. Hwang, "Distortion Resilience for Goal-Oriented Semantic Communication," under revision, *IEEE Transactions on Mobile Computing*.
- [P11] K. Do, M.-D. Nguyen, T. H. Nguyen, L. Tran-Thanh, N. H. Tran, and **Q.-V. Pham**, "Revisiting LARS for Large Batch Training Generalization of Neural Networks," submitted, *33rd ACM International Conference on Information and Knowledge Management (CIKM)*.
- [P12] T.-H. Vu, M. Zeng, S. Kim, H. V. Poor, and **Q.-V. Pham**, "Short-Packet Communications: State-of-the-art and Recent Advances," under review, *IEEE Wireless Communications*.
- [P13] P. Boopathy, N. Deepa, N. Victor, T. R. Gadekallu, P. K. R. Maddikunta, G. Yenduri, W. Wang, **Q.-V. Pham**, T. Huynh-The, and M. Liyanage, "Metaverse for Industry 5.0 in NextG Communications: Potential Applications and Future Challenges," under revision, *Transactions on Consumer Electronics*.
- [P14] N.-M. Luu, M.-D. Nguyen, E. B. Mohamed, V.-D. Nguyen, H. T. Dinh, D. N. Nguyen, and **Q.-V. Pham**, "Sample-Driven Federated Learning for Energy-Efficient and Real-Time IoT Sensing," under review, *IEEE Transactions on Mobile Computing*.
- [P15] M. Le, T. Huynh-The, T. Do-Duy, T.-H. Vu, and W.-J. Hwang, and **Q.-V. Pham**, "Applications of Distributed Machine Learning for the Internet-of-Things: A Comprehensive Survey," under review, *IEEE Communications Surveys & Tutorials*.
- [P16] M.-D. Nguyen, **Q.-V. Pham**, H. T. Dinh, L. Tran-Thanh, D. N. Nguyen, and W.-J. Hwang, "Label-driven Federated Learning," under review, *IEEE Transactions on Parallel and Distributed Systems*.
- [P17] Q. V. Do, **Q.-V. Pham**, Z. Yang, and W.-J. Hwang, "Learning-Based QoE Optimization for Green Edge Computing Networks with Aerial Servers," under review, *IEEE Transactions on Green Communications and Networking*.
- [P18] T. R. Gadekallu, **Q.-V. Pham**, T. Huynh-The, S. Bhattacharya, P. K. R. Maddikunta, M. Liyanage, and T. T. Nguyen, "Federated Learning for Big Data: A Survey on Opportunities, Applications, and Future Directions," under revision, *Engineering Applications of Artificial Intelligence*.
- [P19] M. Alazab, R. Vinayakumar, S. Srinivasan, **Q.-V. Pham**, S. Venkatraman, Soman KP, and K. Simran, "Deep Learning for Cyber Security Applications: A Comprehensive Survey," 10.36227/TechRxiv.16748161.
- [P20] X.-T. Nguyen, M.-D. Nguyen, **Q.-V. Pham**, V.-Q. Do, and W.-J. Hwang, "Resource Allocation for Compression-aided Federated Learning with High Distortion Rate," 10.48550/arXiv.2206.06976.
- [P21] **Q.-V. Pham**, N.-N. Dao, T. Huynh-The, J. Zhao, and W.-J. Hwang, "Clustering and Power Allocation for UAV-assisted NOMA-VLC Systems: A Swarm Intelligence Approach," 10.48550/arXiv.2007.15430.

Journal Articles

- [J1] M. Le, **Q.-V. Pham**, Q. V. Do, Z. Han, W.-J. Hwang, "Resource Allocation in THz-NOMA-enabled HAP Systems: A Deep Reinforcement Learning Approach," *IEEE Transactions on Consumer Electronics*, early access.
- [J2] O. Aouedi, T.-H. Vu, A. Alessio, D. C. Nguyen, and K. Piamrat, G. Marchetto, and **Q.-V. Pham**, "A Survey on Intelligent Internet of Things: Applications, Security, Privacy, and Future Directions," *IEEE Communications Surveys & Tutorials*, early access.
- [J3] T. Huynh-The, N. C. Luong, H. Phan, D. B. da Costa, and **Q.-V. Pham**, "Improved Waveform Classification for Integrated Radar-Communication 6G Systems via Convolutional Neural Networks," *IEEE Transactions on Vehicular Technology*, early access.

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LANGUAGES

VIETNAMESE: Mother-tongue
ENGLISH: Fluent
KOREAN: Basic Knowledge

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